



IO6: Quality Assessment of the New Material and Progress Recommendations for ILSA

Grant Agreement: Funding Scheme:

Project Duration: Project Coordinator: Partners: 2017-1-ES01-KA203-037948 Erasmus+, KA2: Cooperation for innovation and the exchange of good practices KA203: Strategic Partnerships for Higher Education 01/09/2017 – 31/08/2020 (36 months) Universidade de Vigo (UVIGO) Universiteit Antwerpen (UANTWERPEN) Uniwersytet Warszawski (UW) Universität Wien (UNIVIE) De Vlaamse Radio en Televisieomroeporganisatie Nv (VRT) Intro Pr Monika Szczygielska (INTRO)



Document title:

IO6 Report: Quality Assessment of the New Material and Progress Recommendations for ILSA

Authors:

Pablo Romero-Fresco (UVIGO) Jesús Meiriño-Gómez (UVIGO) Isabelle Robert (UANTWERP) Franz Pöchhacker (UNIVIENNA) Wojciech Figiel (UWARSAW) Monika Szcygielska (INTRO PR) Marlies Decuyper (VRT)

Abstract:

This document reports on the development and completion of Intellectual Output 6 (IO6) of the Interlingual Live Subtitling for Access (ILSA) project (2017-1-ES01-KA203-037948). It was devoted to testing and checking the appropriateness and quality of the course design and course materials. The report contains detailed information regarding the different tasks carried out. This IO draws on the results from IO3, IO4 and IO5, and will inform IO7.

Funding Scheme:	Erasmus+,	KA2:	Cooperation	for	innovation	and	the		
	exchange of good practices								
	KA203: Strategic Partnerships for Higher Education								

Dissemination Level:

Р	Public	Х
С	Confidential, only for members of the consortium and the Commission Services	

Copyright and disclaimer:

This document is proprietary of the ILSA consortium members, and no copying or distributing, in any form or by any means, is allowed without the written agreement of the owner of the property rights.

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.







Table of contents

INTRODUCTION	
BACKGROUND	4
AIMS OF 106	5
METHODOLOGY	5
RESULTS	5
SUMMATIVE ASSESSMENT Formative assessment	6 9
CONCLUSIONS	
REFERENCES	
DISCLAIMER	
HOW TO QUOTE THIS DOCUMENT	





This report provides a thorough description of the different assessment tasks carried out with the aim of testing and checking the appropriateness and quality of the materials and design of the ILSA course, based on the results stemming from IO3 (*Profile Definition and Competences of the Professional ILSer*), IO4 (*Mapping the New ILSA Course*) and IO5 (*Development of Training Material for the New ILSA Course*). More specifically, indepth details regarding the three assessment stages will be offered, namely: a pre-test to evaluate participants' performance before the course; a post-test assessing participants' performance and knowledge after taking the course; and a monitoring test whilst the students take the different modules for formative evaluation.

The final outcome of IO6 is a report on how the professional profile (sketched in IO3), the course design (created in IO4) and the training materials (elaborated in IO5) can be updated and improved. In this regard, it includes a collection of recommendations to be applied to the ILSA course.

The structure of the report is as follows: First, some information concerning the work that was already carried out will be provided, as a way of contextualising the activities of the previous IOs. Then, the main aim of IO6 will be posited, and this will be followed by the methodology applied in IO6 as well as the results obtained from the several tests conducted. This last section will be organised into two different subsections, namely summative assessment and formative assessment, in order to help readers understand all the data collected. Some conclusions based on the results previously presented will be offered at the end.

Background

IO6 benefits from all the previous IOs that have been implemented as part of the ILSA project, but especially from IO3, IO4 and IO5. On the one hand, the aim of IO3 was to define the profile and competences of the professional interlingual subtitler. After compiling and critically reviewing the literature on the subject, the ILSA team drafted the first descriptive model and illustrative visualisation of the ILS competence profile. The partners managed to sketch a first competence model for this novel task by undertaking a descriptive analysis of the process and identifying the competences required for successful performance.

On the other hand, the aim of IO4 was to map the new ILSA course, based on the results delivered by the previous IOs and taking the Qualifications Framework of the European Higher Education Area into account. The goal was to include the structure of the course (modules and units), learning outcomes, suggestions for methods of teaching/learning, suggestions for assessment, and suggestions for teaching materials (including blended learning). The final result of this IO was a graphic representation of the proposed course design, visually representing its modular structure, consisting of three foundational components, two core components and two applied components, and an Excel spreadsheet detailing all the learning outcomes of the course.

As far as IO5 is concerned, it aimed to prepare training materials for the new ILSA course, based on the insights from previous IOs and on partners' vast experience in the subject field. Of particular relevance were the results of IO4, as with these insights the ILSA team





proceeded to develop and review training materials, which include, but are not limited to, video lectures, video case studies produced for the course, video tutorials, hands-on exercises, quizzes or reading lists, among others. These materials are now available on a Massive Online Open Course (MOOC) platform and, in addition to that, a repository of practice videos has also been created to facilitate self-practice. All the materials are accessible for people with different impairments; in particular, all the video materials are subtitled, whereas the course materials were audited for their compliance with the Web Content Accessibility Guidelines (WCAG) standard.

Aims of IO6

The main aim of IO6 was to test and check for appropriateness and quality the course design (mapped in IO4) and course materials (created in IO5). To that end, two types of assessments were carried out: (1) a summative assessment in order to monitor academic quality and real usefulness of the course as a whole; and (2) a formative assessment to monitor adequate learning processes and knowledge and confidence levels of the students, as well as their satisfaction throughout the course.

Methodology

The work carried out in IO6, as indicated above, entailed an experimental approach (involving qualitative and quantitative data) with a pre-test-post-test design to test the participants' performance before (prior to taking the course), during (intermediary testing for formative evaluation) and after completion of the course (summative evaluation). In order to test the quality and appropriateness of the course design and its materials, a series of tests were prepared and conducted, as described below.

The summative assessment followed a pre-test-post-test design. Before starting the course, participants took a pre-test consisting of two subtests (an intralingual and an interlingual live subtitling test). At the end of the course, that is, after completion of all modules, participants took a post-test consisting of a comparable interlingual live subtitling test, apart from filling in a self-report questionnaire on difficulty and overall performance. The pre-test-post-test design allowed for a comparison of performance quality and progress. Both assessment results (summative and formative) were collated in order to formulate suggestions for updating and improving the professional profile (IO3) and course design (IO4). As far as the formative assessment is concerned, since the course was designed in a progressive form, the testing of the content was carried out at each stage, that is, for each module, and included self-report questionnaires.

The results that will be presented in the next section are based on all the data gathered from the tests referred to above.

Results

This section includes the data collected from the different tests that were carried out during the development of IO6. These are organised into two different subsections:





summative assessment and formative assessment. Whereas the former followed a pretest-post-test design and allowed for a comparison of performance quality and progress of the students before and after taking the ILSA course, the latter was carried out for each module at the time of their completion.

Summative assessment

As indicated at the beginning of this section, the summative assessment followed a pretest-post-test design, which is described below.

Pre-test

Two different tests were carried out to test potential course material that could be included in the ILSA course. The first pre-test took a 'train, practice and test' approach. The study included the participation of 10 people, even though the data from one participant is not available, and there is not enough data from another participant to carry out a meaningful analysis. Of the remaining eight participants, seven were female and one male. Their average age was 32, the youngest being 23 and the oldest 48. There were seven native Spanish participants and one native English speaker. Two participants were professionals: one being a translation lecturer and professional translator and the other a speech-to-text interpreter. Six participants were postgraduate students in translation, two of which also worked in translation and teaching while studying.

Participants filled out a pre-experiment questionnaire, and a short session on respeaking was delivered for three hours; then they completed a respeaking test and filled out a post-experiment questionnaire. Finally, participants further contributed by answering some questions and making observations about their experience of respeaking orally. Quantitative data was collected by analysing the respoken subtitles, and qualitative data was collected via the questionnaires. Individual performances were recorded with Screencast recording software and were analysed separately.

For training, a short session on respeaking was delivered before the test, as most participants had not previously used Dragon. The session included respeaking theory within the broader subject area of audiovisual translation as well as an introduction to the differences between respeaking and stenography as methods for producing live subtitles, the challenges respeakers face, and what the task entails. The participants, who were mostly new to Dragon, were given basic training in the speech recognition software on how to create their own user voice profile; participants also carried out a dictation practice to familiarise themselves with the software. Participants were able to practise dictation for 30 minutes – it should be noted that most participants chose to complete an intralingual dictation practice rather than an interlingual one. Participants then used the video clips to practise interlingual respeaking. Eight participants respoke the English. Participants could respeak the three video clips as many times as they wanted to within the hour given to practise interlingual respeaking.

As for the materials used, participants respoke three video clips interlingually: a narration, a speech, and a news story. As mentioned above, all the materials used were chosen considering their potential appropriateness to be included in the ILSA course. Due to the two sets of language combinations (English into Spanish and Spanish into English), video clips of similar genres were made available in both Spanish and English. Only two participants respoke the news clips, so these results have not been included in the quantitative analysis.





Furthermore, participants were given the option to watch each video before respeaking it and to attempt respeaking each video more than once. Only the first attempt was analysed for this study. Participants were given one hour to work on the tasks and respeak each video into their native language through a microphone attached to the SR software Dragon.

Participants completed a pre-experiment questionnaire before any training was given. The questionnaire was composed of the following sections: biographical information, language skills, training, competence, subtitles, and respeaking. Closed questions served to determine the demographic of the sample and helped participants to rate their own competence in subtitling and interpreting. In the training, competence and subtitles sections, most questions were multiple-choice so as to reflect the limited options for response. The respeaking section was composed of open-ended questions, allowing participants to express their current perceptions of respeaking and how they thought they might perform.

After the interlingual respeaking tests, participants completed a post-experiment questionnaire composed of the following sections: level of difficulty, expectations, performance, and skills. The level of difficulty and performance questions required participants to rate their performance and to share the most difficult elements of the exercises. The expectations and skills questions allowed participants to reflect in detail upon what happened during the exercises and to note how they perceived their own performance. Participants' perception on the skills and best-suited profile for an interlingual respeaker were sought before and after the test.

Participants' performance was as follows:

P1	P2	P3	P4	P5	P6	P7	P8
96.26	96.61	97.05	97.22	97.48	97.86	97.92	98.50

Most of the results presented were low and did not meet the required 98% threshold – meeting this threshold means that a respoken text is suitable for broadcast. However, they demonstrate that interlingual respeaking could be feasible. Challenges could be overcome by developing task-specific skills through a training programme for interlingual respeakers to build upon their skills used in subtitling, interpreting, and respeaking. For subtitling, knowledge of subtitling for the deaf and hard-of-hearing, segmentation, reformulation, and edition are required. Developing short-term memory, speed, and multitasking all highlight the requirement for elements of training to mirror simultaneous interpreting. Specific skills for respeaking would be software related and should include the 'unlearning' of skills, such as speaking in a pleasant voice due to the importance of dictation and enunciation. Live translation skills are essential for interlingual respeaking as is the ability to dictate accurately to the speech recognition software.

The results of this study shed light on some important aspects to take into consideration:

- All participants noted that they thought they could have performed better if they had received more than one hour of training.
- It appears that subtitling, interpreting, and intralingual respeaking training all hold importance in order to succeed in interlingual respeaking.
- The best performers seemed to be strong live translators, but their accuracy was compromised with poor recognition. This calls for more extensive dictation practice to allow strong live translators to not to underperform due to a lack of software knowledge or dictation practice.





- The severity of errors was one of the main differences between the performance of the good and poor performers. To manage the error severity, trainees should receive information and training on the causes of minor, major, and critical errors and on how to correct major and critical errors live.

In a nutshell, more research is required to determine the best-suited professional profile for an interlingual respeaker. The qualitative data suggests that an interpreter would be best suited. However, the quantitative data shows that the highest-performing participants did not have previous interpreting training, which may give some hope for subtitling skills to be useful in training. At this stage, it would be fair to conclude that interlingual respeaking seems feasible, provided that a suitable training programme is produced to train interlingual respeakers to produce quality subtitles. Doing so would ensure that interlingual respeaking becomes a common practice that can cater for a wide audience.

Off the back of the previous pilot study, a main study was conducted and, where possible, addressed the points above. To collect concrete data on the task-specific skills required and to determine the best-suited professional profile for an interlingual respeaker, it is important to give participants longer dictation practice to train their user voice profile; this is necessary because it stops good performers from underperforming due to poor dictation. Intralingual respeaking practice is also necessary to develop the multitasking aspect of respeaking, to practise with the software, and to train the voice profile. Once participants have had the chance to work on the aforementioned skills, they could move on to interlingual respeaking practice. The hybrid nature of interlingual respeaking calls for participants to have an understanding of the useful skills that can be obtained from subtitiling, such as segmentation and reformulation; from interpreting, such as listening and speaking at the same time and live translation.

To conduct this second study, a four-week course was designed to train a large number of participants online so that they could produce a series of respoken texts; these texts were then analysed to gather relevant data on the translation and recognition errors and the accuracy rates of each respoken text. A pre-course questionnaire was prepared to collect data on the demographic of the sample, participants' previous training, and their expectations of respeaking. The pre-course questionnaire was to allow for a comparison of the participants' expected performance with their actual performance and served to gather details on what they thought were the task-specific skills and profile best-suited for an interlingual respeaker.

A total of 44 participants took part in the study, in which participants of interpreting and subtitling backgrounds received brief training in dictation, intralingual, and interlingual respeaking and carried out various respeaking exercises. The interpreter group is made up of 27 participants, of which 13 have a clear-cut interpreting background, and 14 have a background of interpreting with some subtitling experience. Five participants are male, and 22 female; their average age was 24 years, the youngest being 21 years old and the oldest being 40 years old. The subtitler group is made up of 17 participants, of which 10 participants have a clear-cut subtitling background, and seven participants are subtitlers with some interpreting experience. 12 are female and five are male; their average age was 26, with the youngest being 22 years old and the oldest being 40 years old.





The participants had to respeak 6 videos of different genres, namely a wildlife documentary (intralingual respeaking), an online class (intralingual respeaking), a speech on beer (interlingual respeaking), an interview (interlingual respeaking), a speech on feminism (interlingual respeaking) and a speech on gardening (interlingual respeaking).

A total of 264 texts were analysed, amounting to approximately 135,000 words, 7,500 subtitles, and 140 hours of respeaking practice. The overall results are evidence for the feasibility of interlingual respeaking. The average accuracy rates for the intra- and interlingual exercises were 98.24% (5.5/10) and 97.36% (3.5/10) respectively.

For the second pre-test, 7 trainees took an online interlingual respeaking course delivered by the University of Vigo. As was the case of the first pre-test, potential material for the ILSA course was used also for this training. Trainees were provided with readings on respeaking different genres of television, source video material to respeak from sports, news, weather, speeches and interviews. They also carried out a self-assessment each week with the NTR model, which gave them insight into the translation and recognition errors that can be made by an interlingual respeaker. This longer course and more substantial course material allowed trainees to reach higher accuracy rates with averages of 99.5% in intralingual and 98% in interlingual respeaking. Some trainees even reached 99% when respeaking sports and speeches.

Post-test

The post-test part involved a test by 22 participants: 16 of them were female and 6 were male. They were MA-students, and all were Spanish native speakers. They all took the modules of the ILSA course, guided by the members of the ILSA project and did a final test at the end. This consisted of a 3-minute (Spanish-English) interlingual respeaking practice. Their performance, as assessed according to the NTR model (Romero-Fresco and Pöchhacker, 2017), ranged from 99.40 % to 94.10%, as can be seen below, whereas their average accuracy rate was 97.78%:

P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11
99.40	99.04	98.93	98.90	98.86	98.82	98.70	98.60	98.40	98.18	98.10
P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22
98.04	97.98	97.80	97.72	97.48	97.33	96.60	96.40	96.346	95.57	94.10

A few conclusions can be drawn from the tests described above. On the one hand, there is no doubt that the materials used proved to be useful when training people to be intraand interlingual respeakers. This means that the inclusion of these materials as part of the ILSA course is beyond doubt, based on their quality as well as appropriateness. On the other hand, in line with that, training in respeaking also proved to be necessary and, on top of that, feasible, bearing in mind how participants in the test improved their performance after having received training.

Formative assessment

Formative assessment was carried out for each module of the ILSA course. Since each of them was designed in a progressive form, the testing of the content was performed at each stage, that is, for each module. This sequential development with ad hoc testing ensured content quality, adequacy and progress. The data for this assessment was gathered from the feedback received from 22 MA-students who had the opportunity to take the different modules of the ILSA course as they were being elaborated, under the guidance of the ILSA project members. In order to facilitate comprehension, the feedback presented below is organised into two different subsections, namely strong points and areas that





need improvement, and, within each, the information is shown based on the different modules.

Strong points

Module 1a

The feedback received praises the contents of the module as very relevant, offering a good selection of both theoretical and practical contents. Particular reference is made to Unit 4.

Module 1b

The students highlighted the structure of the module, apart from its contents (especially those included in Unit 5), which are said to be very educational, including a balanced mix of theoretical and practical contents. Moreover, the video tutorials and interviews have proved to be very useful.

Module 1c

The materials of this module, in particular those of units 3, 4 and 5, together with its structure, were very well received. Moreover, the clarity of the contents of units 4 and 5 was also highlighted, as well as the information regarding terminology included in Unit 3. Finally, the students also praised the video lectures and exercises as very educational.

Module 2a

The contents of this module, together with the activities included as well as the students' sample practices, were described as innovative, interesting, educational and highly relevant. Moreover, the instructions on how to use the software referred to in Unit 2 proved to be very useful, and the explanations included in units 2 and 3 seem to be very clear and educational.

Module 3b

This module was described as very meaningful, well-structured and educational, in particular, the interview with Wojtek Figiel, the troubleshooting section and, again, the students' sample practices. Furthermore, the mock exam included at the end was described as very relevant, covering all the contents included in the course.

General comments

As a general comment, the feedback received highlights the quality of the contents, including the questionnaires, the structure of the course and the user-friendliness of the platform where the course is hosted.

Areas that need improvement

Module 1a

With regards to Unit 1, the quiz included in section 1.8 seems to be a bit long, even though it is also mentioned that the reason for this might be the thoroughness of the contents included. As for Unit 3, information regarding countries that are in a better position in terms of accessibility could have been added, whereas an explanation about the relation between translators/respeakers and the content of the unit would have been appreciated. Moreover, the content of Unit 4 is very detailed and might have been abridged.

As a general comment, materials about the situation described in this module in Spain could improve the quality of the contents, apart from a video made by people with disabilities showing their experiences with technology and audiovisual media. Finally,





Module 1b

On the one hand, some online theoretical references regarding segmentation could be provided in Unit 2, whereas the use of the software referred to in Unit 3 requires some practical activities to get familiar with it, and these should be better undertaken in a face-to-face class. On the other hand, an interview with a subtitler could be included within the materials of Unit 4. Moreover, as a general recommendation, face-to-face practices should be added to the materials included in this module, together with a visit to a subtitling studio. Last but not least, the teacher's guide should be move to the beginning (as per the other modules).

Module 1c

In Unit 4, there is a link to a video ("Agua") that is not working. As a general comment, including a video of a simultaneous interpretation could help better understand the content of this module, and the languages available could be expanded as well to reach a wider audience.

Module 2a

On the one hand, Unit 1 could benefit from including examples of live subtitling in Spain (and other Spanish-speaking countries), apart from the fact that the subtitles of the video lecture and the video interview contain a few typos that need correcting. On the other hand, and this seems to be a recurrent issue, the software referred to in Unit 2 requires more practice in order for the students to get familiar with it. In this same unit, a video explaining how to create a pronunciation profile could be added. As for Unit 4, the formula of the NER model could be sort of expanded, so that it refers to the idea that the number of words includes also punctuation. Moreover, some feedback was received with regards to the questionnaires included in this module, which could be modified so that the answers are provided at the end of each questionnaire instead of after each question. Finally, the module could also benefit from including materials about other types of events (conferences, lectures, etc.).

Module 3b

On the one hand, the contents included in units 2.6 and 3.4 refer to promotional material about EdX and, thus, do not fall under what is mentioned in the title. On the other hand, some detailed explanations regarding certain terminology that is mentioned in the video lectures could be provided, together with information regarding the work of the event moderators. Moreover, the troubleshooting section could be replicated in other modules, whereas some repetition throughout the module was also found.

General comments

Some comments with regards to issues about the course in general were received. On the one hand, there seems to be a lack of practical activities throughout the modules, apart from questionnaires in some units. Furthermore, students would benefit from having licences to use the software that is employed in the professional practice. Finally, some remarks were received with regards to a need of improvement in the organisation of the contents on the platform, for example by numbering the units within each module in a different way: Module 1 - Unit 1.1, rather than Module 1 - Unit 1.





This report has provided an in-depth overview of all the work carried out in IO6 and, more specifically, with regards to the several tests carried out to check the appropriateness and quality of the course design and course materials. As far as the different tests is concerned, the formative and summative assessments have shed light on some recommendations for training. Those who achieved good accuracy rates experienced minimal technical issues and dictated clearly, with good volume and at a steady pace. This shows that extensive dictation and software practice is needed to reduce recognition errors, which could also allow strong live translators not to underperform due to poor recognition. A focus on dictation and software is required in the initial stages of training.

Moreover, top performers in intralingual respeaking also performed well in interlingual respeaking, indicating that it may be necessary for training to start with intralingual respeaking before adding the extra complexity of language transfer. We know that interlingual respeaking is a complex task with many layers. Respeaking practice could be based around the five tasks involved: (1) listening to the source text, (2) respeaking the target text, (3) monitoring the output, (4) watching the images on screen and (5) correcting the target text. Trainees could be asked to add a step for each exercise they complete so they progressively work up to the full respeaking task.

In line with the above, audiovisual materials should cover different genres, topics and speech rates. Introducing videos with easy content, a low speech rate and long pauses would allow trainees to listen and speak at the same time. Increasing speech rates, content difficulty and density with each exercise would give trainees a sense of progression and would allow them to minimise recognition errors, which are far easier to tackle than translation errors. It is also advantageous for tasks to include an element of quality assessment, either for trainees to self-assess their respoken output with the NTR model, or to focus on one type of translation error per exercise.

Last but not least, all the work carried out in this IO has proved to be essential in building up the ILSA course, and, in particular, in selecting the best materials, which are an integral part of the course. The different tests shed light not only on the quality of the materials chosen, but also on the necessity to train experts in interlingual respeaking.

References

Romero-Fresco, P. & Pöchhacker, F. (2017). Quality assessment in interlingual live subtitling: The NTR Model. *Linguistica Antverpiensia, New Series: Themes in Translation Studies, 16*, 149-167.

Disclaimer

The publication and preparation of this report was supported by ILSA (Interlingual Live Subtitling for Access), financed by the European Union under the Erasmus+ Programme, Erasmus+, KA2: Cooperation for innovation and the exchange of good practices, KA203:





Strategic Partnerships for Higher Education, Project number: 2017-1-ES01-KA203-037948.

The information and views set out in this report are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

How to quote this document

You can quote this report as follows: ILSA (2020). Report on IO6: Quality Assessment of the New Materials and Progress Recommendations for ILSA from http://www.ilsaproject.eu/project/